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Sekine et al.

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(54) **LUBRICANT APPLYING SYSTEM FOR A ROLLING BEARING**

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(75) Inventors: **Masaaki Sekine**, Kanagawa (JP);
Katsuyoshi Yamashita, Kanagawa (JP);
Michiharu Naka, Kanagawa (JP)

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(73) Assignee: **NSK Ltd.**, Tokyo (JP)

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Bicycle Maintenance, Home and Garden Television, <http://www.hgtv.com/HGTV/project/0.1158>, BDRE project 29041,00.html.

Primary Examiner—Michael Cygan

(74) *Attorney, Agent, or Firm*—Sughrue Mion, PLLC

Related U.S. Application Data

(60) Continuation of application No. 10/225,296, filed on Aug. 22, 2002, now Pat. No. 6,755,071, which is a division of application No. 09/471,232, filed on Dec. 23, 1999, now Pat. No. 6,477,885.

(30) **Foreign Application Priority Data**

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(52) **U.S. Cl.** **73/10; 73/865.8; 184/6.4; 340/631**

(58) **Field of Search** **73/10, 865.8; 184/6.4; 340/631**

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(57) **ABSTRACT**

In a lubricant application system, a prescribed volume of lubricant is transferred from a lubricant discharge port **8** of a prescribed liquid volume discharge device to a rolling element **703** of a rolling bearing **700** in a state in which the lubricant discharge port **8** is positioned directly above and sufficiently close to the rolling element **703**, whereby the lubricant is applied to the interior of the rolling bearing **700**. Further, the application system inspects whether or not a prescribed volume of lubricant is injected from the discharge device for injecting a lubricant into the interior of a rolling bearing **700**. A laser beam L_1 is irradiated between a lubricant discharge port **8** of the lubricant discharge device and the rolling bearing **700**, and a reflected laser beam L_2 reflected by the lubricant when it is discharged from the lubricant discharge port **8** is received by a photoreceptor **116** disposed on the optical axis of the reflected laser beam L_2 , whereby whether or not the lubricant is applied to the rolling bearing **700** is determined based on an output from the photoreceptor **116**.

8 Claims, 14 Drawing Sheets

